

What is claimed is:

1. A liquid crystal display element comprising:

a pair of substrates;

transparent electrodes having predetermined patterns formed on said
5 respective substrates;

vertical orienting membranes respectively formed on said transparent
electrodes; and

a liquid crystal layer consisting of the liquid crystal molecules sandwiched
by said substrates, wherein:

10 pair of said substrates are arranged such that respective transparent
electrodes face each other;

series of nearly rectangular slits are formed on said respective
transparent electrodes by removing portions of said electrodes in a display area
formed by said electrodes; and

15 series of said slits on one and other transparent electrodes are
alternately arranged in a normal direction to a longitudinal direction of series of
said slits, when said substrates are viewed vertically.

2. The liquid crystal display element according to claim 1, wherein: a
width of said slits in the normal direction to the longitudinal direction of said slits
20 is set more than $10\mu\text{m}$, but less than $30\mu\text{m}$.

3. The liquid crystal display element according to claim 1, wherein: a
width of said slits in the normal direction to the longitudinal direction of said slits
is set 2.5 times more than a thickness of said liquid crystal layer.

4. The liquid crystal display element according to claim 1, wherein: a

horizontal distance between two neighboring alternately arranged slits in the normal direction to the longitudinal direction of said slits is set more than $10\mu\text{m}$, but less than $60\mu\text{m}$.

5 5. The liquid crystal display element according to claim 1, wherein: a horizontal distance between two neighboring alternately arranged slits in the normal direction to the longitudinal direction of said slits is set more than the width of said slits, but less than $60\mu\text{m}$.

6. The liquid crystal display element according to one of claims 1 to 5, wherein: said display area is a segment display type area.

10 7. The liquid crystal display element according to one of claims 1 to 5, wherein: said display area is a dot-matrix display type area driven by a simple matrix driving method.

15 8. The liquid crystal display element according to one of claims 1 to 5, wherein: said display area is a area combined a segment display type area and a dot-matrix display type area driven by a simple matrix driving method.

9. The liquid crystal display element according to one of claims 1 to 5, wherein: said display area is a dot-matrix display type area driven by an active matrix.

20 10. The liquid crystal display element according to claim 7 or claim 8, wherein: slits both ends of one dot in a normal direction to the longitudinal direction of said slits are formed on the electrode arranged normal to the longitudinal direction of said slits.

11. The liquid crystal display element according to claim 9, wherein: outermost slits in the normal direction to the longitudinal direction of said slits are

formed on a common electrode facing a certain pixel electrode.

12. The liquid crystal display element according to claim 1, wherein: said slit is divided into a plurality slits in the longitudinal direction of said slit.